

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of providing advance information to a receiver in a home network, comprising:

 providing auxiliary coding comprising a station ID parameter of a transmitting home network device to said receiver; and

 providing data packets to said receiver;

 wherein said auxiliary coding is used to perform a table look-up in a station pre-training table to determine one or more training values associated with data packets on a packet-by-packet basis and allows said receiver to communicate with a plurality of stations having different transmission characteristics on a packet-by-packet basis.

2. (original) The method of providing advance information to a receiver in a home network according to claim 1, wherein:

 said auxiliary coding is encompassed within said data packet.

3. (original) The method of providing advance information to a receiver in a home network according to claim 1, wherein:

 said auxiliary coding is transmitted before said associated data packet.

4. (original) The method of providing advance information to a receiver in a home network according to claim 3, wherein:

 said auxiliary coding is inserted into a preamble of said data packet.

5. (original) The method of providing advance information to a receiver in a home network according to claim 1, further comprising:

transmitting said auxiliary coding with a same RF front end as said data packet.

6. (original) The method of providing advance information to a receiver in a home network according to claim 1, further comprising:

transmitting said auxiliary coding with a first RF front end; and

transmitting said data packet with a second RF front end different from said first RF front end.

7. (original) The method of providing advance information to a receiver in a home network according to claim 1, wherein:

said auxiliary coding is transmitted using FSK.

8. (original) The method of providing advance information to a receiver in a home network according to claim 1, wherein:

said auxiliary coding is transmitted using BPSK.

9. (original) The method of providing advance information to a receiver in a home network according to claim 1, wherein:

said auxiliary coding is transmitted using QAM.

10. (original) The method of providing advance information to a receiver in a home network according to claim 1, wherein said auxiliary coding comprises:

a source address identifying a transmitter of said data packet.

11. (original) The method of providing advance information to a receiver in a home network according to claim 10, wherein:

said source address is a local address.

12. (original) The method of providing advance information to a receiver in a home network according to claim 10, wherein:

 said source address comprises 5 or fewer symbols.

13. (original) The method of providing advance information to a receiver in a home network according to claim 10, wherein:

 said source address comprises 5 or fewer bits.

14. (original) The method of providing advance information to a receiver in a home network according to claim 1, wherein:

 said auxiliary coding is provided in a signal independent from a signal including said data packet.

15. (original) The method of providing advance information to a receiver in a home network according to claim 1, wherein said auxiliary coding comprises at least one of:

 data mode;

 baud rate;

 transmit station ID; and

 coding information.

16. (currently amended) Apparatus of providing advance information to a receiver in a home network, comprising:

 means for providing auxiliary coding comprising a station ID parameter of a transmitting home network device to said receiver; and

 means for providing data packets to said receiver;

 wherein said auxiliary coding is used to perform a table look-up in a station pre-training table to determine one or more training values associated with data packets on a packet-by-packet basis and allows said receiver to communicate with a plurality of stations having different transmission characteristics on a packet-by-packet basis.

17. (original) The apparatus for providing advance information to a receiver in a home network according to claim 16, wherein:

 said means for providing auxiliary coding encompasses said auxiliary coding within said data packet.

18. (original) The apparatus for providing advance information to a receiver in a home network according to claim 16, wherein:

 said means for providing auxiliary coding transmits said auxiliary coding before said means for providing said data packet provides said associated data packet.

19. (original) The apparatus for providing advance information to a receiver in a home network according to claim 18, wherein:

 said means for providing auxiliary coding inserts said auxiliary coding into a preamble of said data packet.

20. (original) The apparatus for providing advance information to a receiver in a home network according to claim 16, further comprising:

 means for transmitting said auxiliary coding with a same RF front end as said data packet.

21. (original) The apparatus for providing advance information to a receiver in a home network according to claim 16, further comprising:

 means for transmitting said auxiliary coding with a first RF front end; and

 means for transmitting said data packet with a second RF front end different from said first RF front end.

22. (original) The apparatus for providing advance information to a receiver in a home network according to claim 16, wherein:

 said means for providing auxiliary coding transmits said auxiliary coding using FSK.

23. (original) The apparatus for providing advance information to a receiver in a home network according to claim 16, wherein:

 said means for providing auxiliary coding transmits said auxiliary coding using BPSK.

24. (original) The apparatus for providing advance information to a receiver in a home network according to claim 16, wherein:

 said means for providing auxiliary coding transmits said auxiliary coding using QAM.

25. (original) The apparatus for providing advance information to a receiver in a home network according to claim 16, wherein said auxiliary coding comprises:

 a source address identifying a transmitter of said data packet.

26. (original) The apparatus for providing advance information to a receiver in a home network according to claim 25, wherein:

 said source address is a local address.

27. (original) The apparatus for providing advance information to a receiver in a home network according to claim 25, wherein:

 said source address comprises 5 or fewer symbols.

28. (original) The apparatus for providing advance information to a receiver in a home network according to claim 25, wherein:

 said source address comprises 5 or fewer bits.

29. (original) The apparatus for providing advance information to a receiver in a home network according to claim 16, wherein:

 said means for providing said auxiliary coding provides said auxiliary coding in a signal independent from a signal including said data packet.

30. (original) The apparatus for providing advance information to a receiver in a home network according to claim 16, wherein said auxiliary coding comprises at least one of:

- data mode;
- baud rate;
- transmit station ID; and
- coding information.